

# 1. Document Details

# 1.1. Revision History

Version	Date	Document Changes	Author
1.0	July 29, 2016	Initial version.	Ather Shaikh
2.0	24-Nov-2016	Final Version	Ather Shaikh
3.0	29-Nov-2016	Included BI security configuration details	Iñigo Hernáez

# 1.2. Approvals

Role	Name	Title	Signature	Date

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# 3. Introduction

## **Referenced Documents**

ID	Name	Туре	Location	Description
01				
02				
03				
04				
05				
06				

# **Assumptions**

This document has been released considering the following assumptions:

ID	Assumption
01	
02	
03	

### 4. EBS Configuration

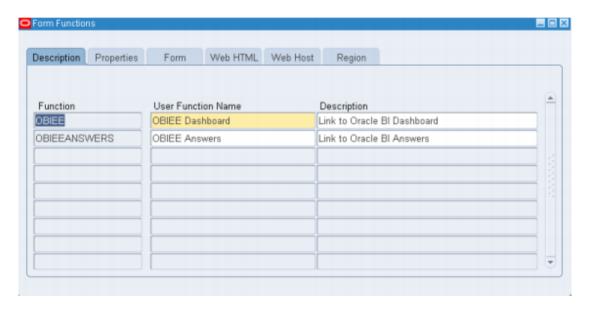
### 4.1. Embedding Links to OBI in Oracle EBS

#### 4.1.1. Creating a Function

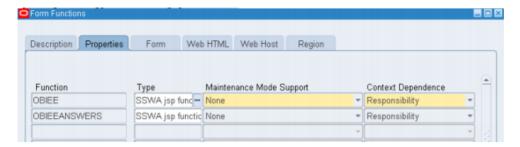
• From the Application menu, select Function.



- The Form Function dialog appears. Fill the fields with below values (If doesn't exist),
- Only Create OBIEE Function. (not obiee answers)



• In the Tab Properties: Specify the Type as SSWA jsp function



- For the HTML Call, enter one of the following options:
  - To link to dashboards, enter OracleOasis.jsp?mode=OBIEE&function=Dashboard

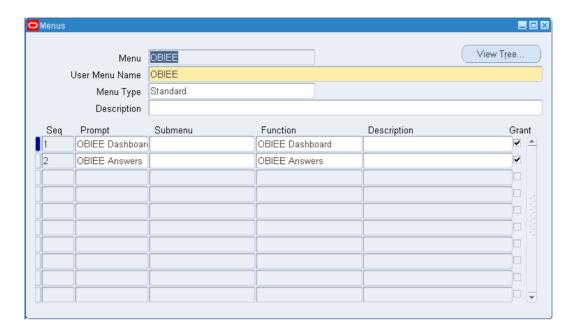


#### 4.1.2. Creating the Menu

• From The Application menu, select Menu.



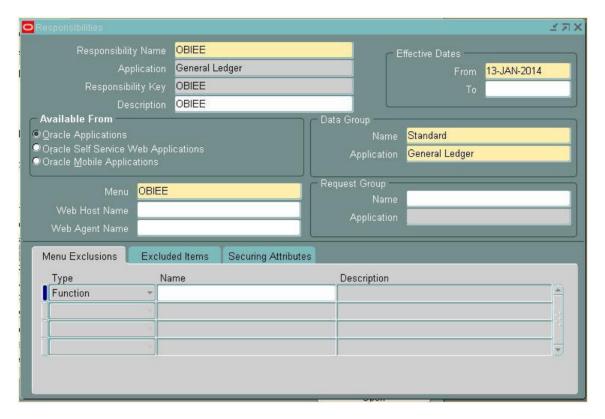
• Create the Menu "OBIEE" is it doesn't exist.



## 4.1.3. Assigning Menu to Responsibility

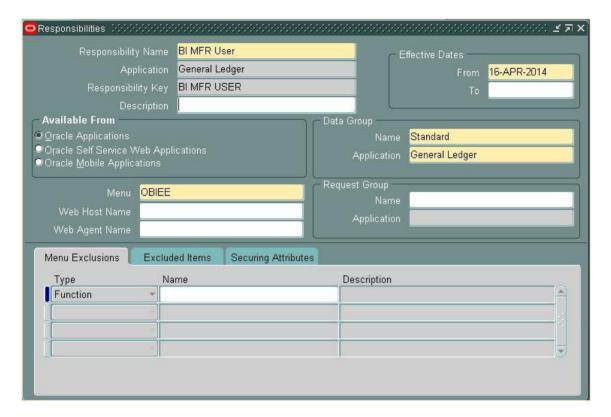
Create 2 new responsibilities as below

S.No.	Form Field	Value		
1	Responsibility Name	OBIEE		
2	Application	Human Resources		
3	Responsibility Key	OBIEE		
4	Description	OBIEE		
5	Available Form	Oracle Application		
6	Data Group – Name	Standard		
7	Data Group – Application	Human Resources		
8	Menu	OBIEE		



#### Create another responsibility

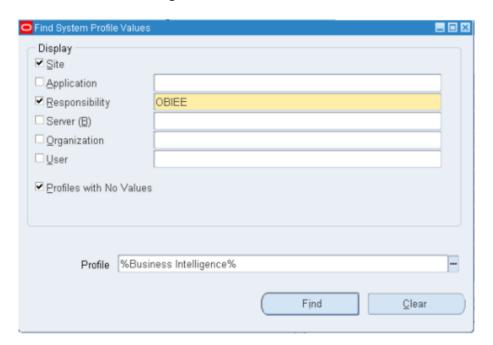
S. No.	Form Field	Value		
1	Responsibility Name	BI HRMS User		
2	Application	Human Resources		
3	Responsibility Key	BI HRMS User		
4	Description	BI HRMS User		
5	Available Form	Oracle Application		
6	Data Group – Name	Standard		
7	Data Group – Application	Human Resources		
8	Menu	OBIEE		



Save and close.

### 4.1.4. Setting up a Profile

- From the Profile Menu and then select System Profile
- Select Responsibility and then enter the name of the responsibility which you created earlier (OBIEE and BI HRMS User)
- Enter %Business Intelligence% in the Profile field

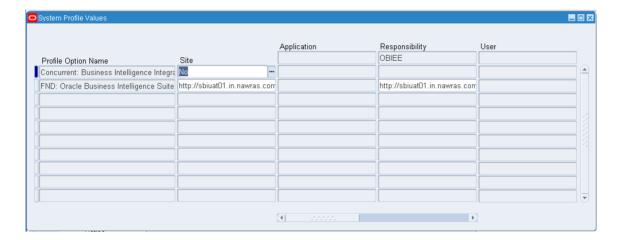


- Click Find
- On the resulting screen, specify the Oracle Business Intelligence URL.

http://dxb-bitest-01.mbcgroup.local:9704 (UAT), or

http://dxb-biprodapp-01.mbcgroup.local:9502 (PROD)

Note: The BI URL should be the fully qualified hostname including the domain name. It shouldn't be an IP Address



Save you changes using the save button on the toolbar

# 5. OBIEE Configuration Changes

### 5.1. Updating authenticationschemas.xml

- Open the file authenticationschemas.xml for editing. This file can be found at: /u02/app/BI\_PROD/bi/bifoundation/web/display
- Find the following element in the file: <a href="mailto:kuthenticationSchema"><a href="mailto:kuthenticationSchema">kuthenticationSchema name="EBS-ICX"</a></a>
- Locate the sub-element RequestVariable *source="cookie"* and change the value of the *nameInSource* attribute from ICX\_SESSION to the name of the EBS ICX authentication cookie prefix. For example:

<RequestVariable source="cookie" type="auth" nameInSource="ERPU1"
biVariableName="NQ\_SESSION.ICX\_SESSION\_COOKIE"/>

Test Server: ERPU1

Production Server: ERPPROD

*NOTE:* Find the name of the cookie in the below step.

• Add the following variable as well

```
<RequestVariable source="constant" type="auth" nameInSource="ssi" biVariableName="NQ_SESSION.SERVICEINSTANCEKEY" />
```

#### Find the Cookie name

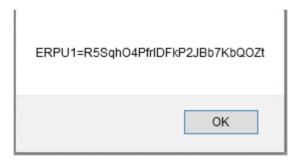
Follow these steps to find the cookie name:

- Log in to Oracle E-Business Suite.
- Enter the following text in the address bar of your browser:

```
javascript:alert(document.cookie)
or
javascript:document.write(document.cookie)
```

The first one will open an alert box with the cookie names and values as a semicolon separated list of values, the second option will write the cookie names/values to the page allowing them to be copy/pasted into other applications

• The cookie is displayed. For example:



■ The value you need to provide in authenticationschemas.xml is the prefix of the EBS ICX authentication cookie. In the previous example, the EBS ICX authentication cookie is R5SqhO4PfrlDFkP2JBb7KbQOZt and the prefix is ERPU1.

#### Configure SchemaKeyVariable in authenticationschemas.xml

- In the same entry (RequestVariable source="cookie"), ensure that the value of the biVariableName attribute is the same as the value you entered as part of the connection script when you created the connection pool for the Oracle E-Business Suite database.
- Find the following element:
  - <SchemaKeyVariable source="cookie"</pre>

Change the value of the nameInSource attribute from ICX\_SESSION to the name of the EBS ICX authentication cookie prefix (often ERPU1). For example:

<SchemaKeyVariable source="cookie" nameInSource="ERPU1" forceValue="EBS-ICX"/>

Save and close the file.

### 5.2. Updating instanceconfig.xml

- Open the file instanceconfig.xml for editing. This file can be found at: /u02/app/BI\_PROD/user\_projects/domains/bi/config/fmwconfig/biconfig/OBIPS
- Find the following element in the file and add the highlighted value:

### **5.3. To Configure Multiple Authentication**

To configure multiple authentication providers so that when one fails, users from other authentication providers can still log in to Oracle Business Intelligence:

1. Open the file adapters.os xml for editing.

file is located in:

- /u02/app/BI PROD/user projects/domains/bi/config/fmwconfig/ovd/default
- 2. Locate the following element in the file:

```
<critical>true</critical>
```

Change the value of the <critical> element to false in the adapters.os\_xml file for each authenticator provider that is not critical, as follows:

```
<critical>false
```

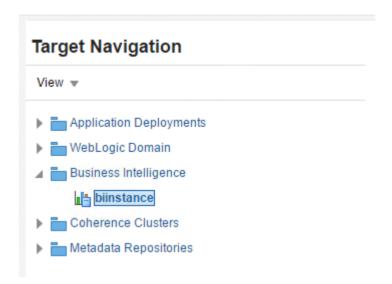
- 3. Save and close the file.
- 4. Restart WebLogic Administration Server and Managed Servers.

# 5.4. Enable Single Sign-on in Enterprise Manager

1. Login Enterprise Manager http://10.10.131.23:9500/em

**Enter Administrative Credentials** 

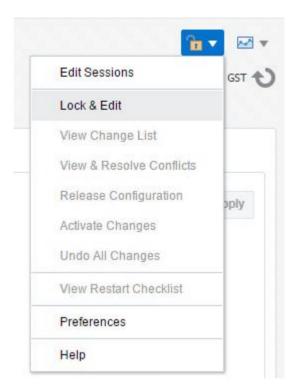
2. Go to Target Navigation and select Business Intelligence → biinstance



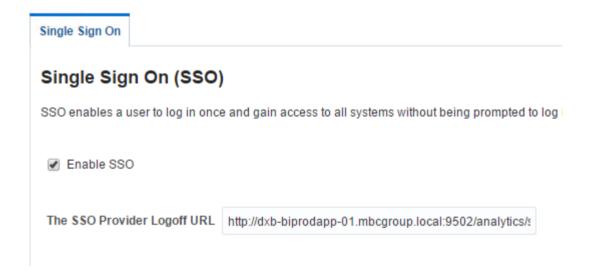
3. Click on Security Tab



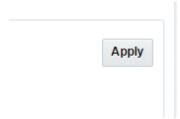
4. Lock the Edit Mode



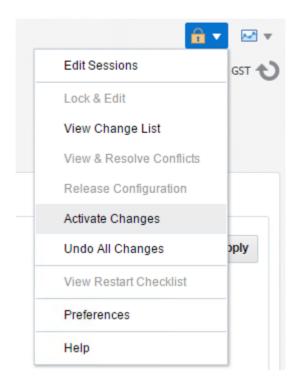
5. Enable SSO and give Logoff URL



6. Click Apply button to apply the changes



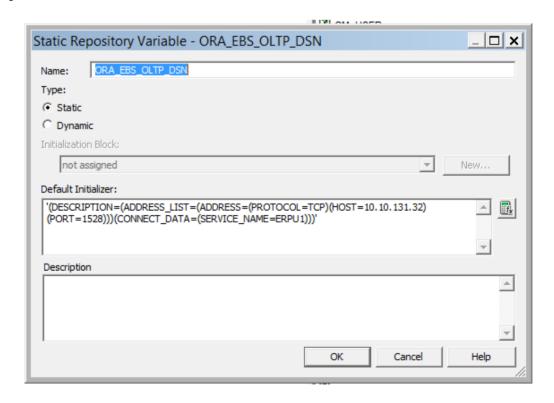
7. Activate Change from the Lock Menu



Changes will be applied and the Lock Edit Mode will be release automatically.

## 5.5. Update Repository

1. Update Static Variables for Oracle EBS DSN and Username

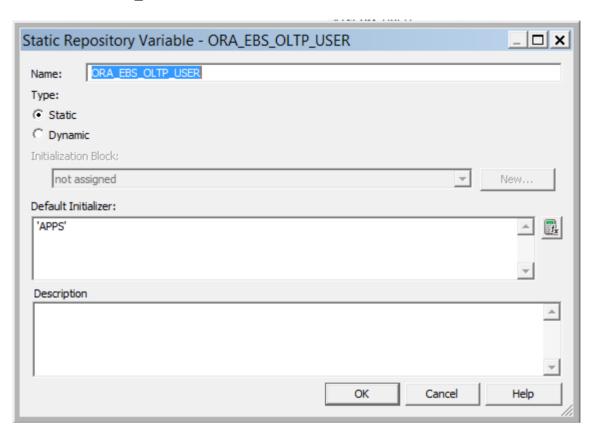


#### 2. UAT Environment

#### 3. PROD Environment

'(DESCRIPTION=(ADDRESS\_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=10.10.162.33)(PORT=1551)))(CONNECT\_DATA=(SERVICE\_NAME=ERPROD2)))'

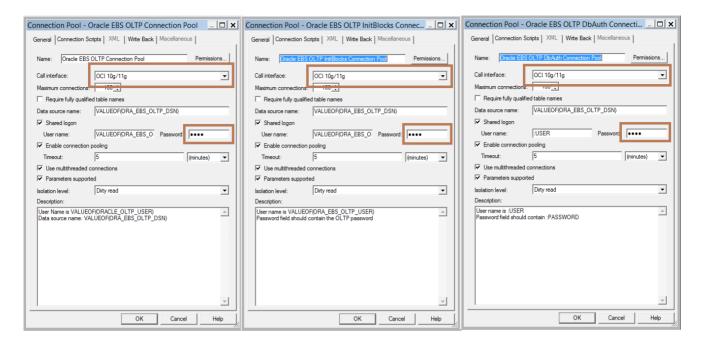
4. ORA\_EBS\_OLTP USER = 'APPS'



5. Update Oracle Call Interface if it is not OCI10g/11g for all the following "Oracle EBS OLTP"



6. Update password for each connection pool for "Oracle EBS OLTP"



7. Test the Init Block (Only Testing purpose, do not save the below changes)

Pass the parameter cookie value ERPU1=rcu4aJff3ruaEyFEsJkAbC1qnm

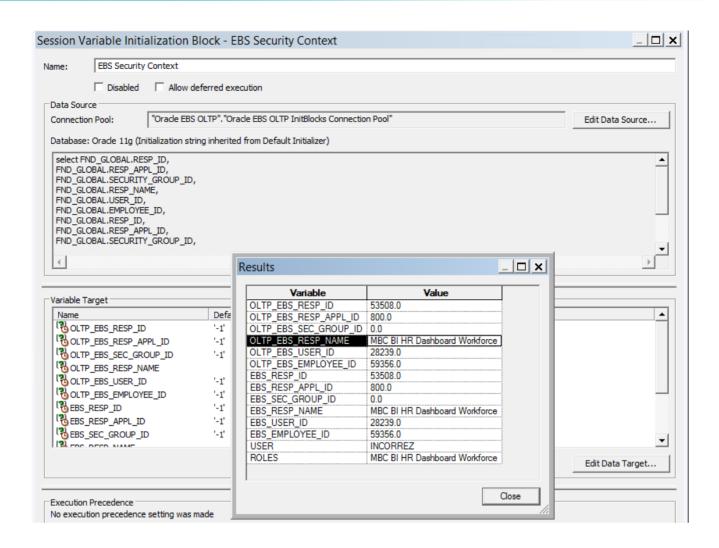
From

call

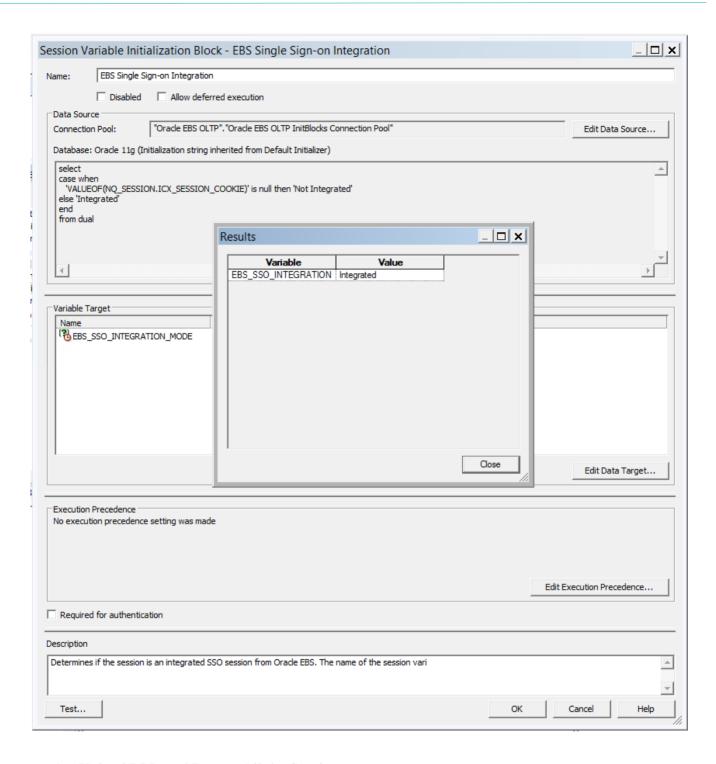
 $APP\_SESSION.validate\_icx\_session('value of(NQ\_SESSION.ICX\_SESSION\_COOKIE)') \\ To$ 

call APP\_SESSION.validate\_icx\_session('rcu4aJff3ruaEyFEsJkAbC1qnm')

Click Test, it should give some results as following snapshot.



8. EBS Single Sign-on Integration



9. Upload RPD and Restart All the Service

## 6. Security Configuration

#### 6.1. Introduction

The integration of EBS and OBIEE allows mapping the responsibilities of the user and apply them to grant security permissions in the BI platform.

Security has been defined at 2 levels for this project:

- Catalog security: Defines the dashboard pages that a user can access.
- **Data security:** Defines the data that a user can see.

In both cases, the security application roles of OBIEE are mapped to EBS responsibilities. Each user should be assigned 2 responsibilities in EBS, one to define the Catalog Security and one to define the Data Security.

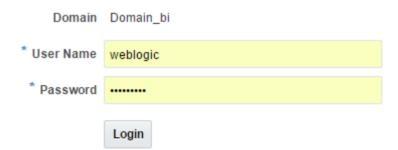
### 6.2. Mapping between EBS Responsibilities and OBIEE Application Roles

OBIEE has been configured to retrieve the list of EBS responsibilities of a user when it logs into the BI. In order to apply security rules in the BI, these EBS responsibilities are mapped to OBIEE application roles. In order for this mapping to happen the name of the EBS responsibility and the name of the OBIEE application role have to be the same.

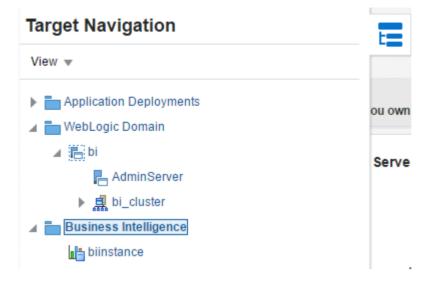
#### **6.2.1. Creating OBIEE Application Roles**

Follow this steps to create an OBIEE application role that will be mapped to an EBS responsibility.

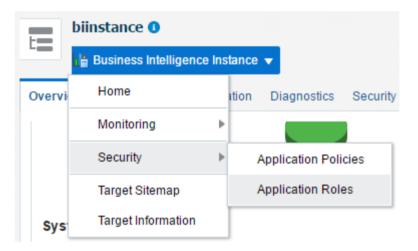
- 1. Log into Weblogic Enterprise Manager with an administrator user:
  - Test: http://10.10.131.21:9709/em
  - Production: http://10.10.131.23:9500/em



2. Open the *Target Navigation* menu and select *Business Intelligence* → *biinstance*:



3. Show the *Business Intelligence Instance* menu and select *Security* **>** *Application Roles*:



4. Click on the *Create* button:



5. Enter the Application Role details:



6. Click on the *OK* button:

OK

7. A pop-up message will confirm that the new Application Role has been created:



### 6.3. Catalog Security

### 6.3.1. Defined EBS Responsibilities

The following mapping between EBS Responsibilities and OBIEE Catalog elements has been defined for this project based on the requirements of the involved parties:

	Dashboard	Management Dashboard			Human Resources Dashboard					
	Dashboard Page	Finance	Procurement	Human Resources	Workforce	Recruitment	Learning	Payroll	Leaves	Time and Attendance
	MBC BI Management Dashboard	Y	Y	Y						
ţ	MBC BI HR Dashboard				Y	Y	Y	Y	Y	Y
onsibili	MBC BI HR Dashboard Workforce				Y					
3S Resp	MBC BI HR Dashboard Recruitment					Y				
Oracle EBS Responsibility	MBC BI HR Dashboard Learning						Y			
Ō	MBC BI HR Dashboard Payroll							Y		
	MBC BI HR Dashboard LTA								Y	Y

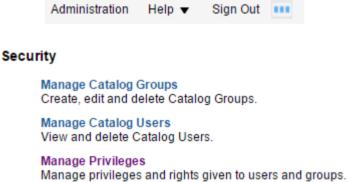
#### 6.3.2. Applying New Catalog Security Rules

In order to apply new security rules at the OBIEE Catalog level, please, make sure to first create the required Application Roles as explained in section 6.2.1. Once this is done, follow these steps to apply the security:

- 1. Log into OBIEE Analytics with an administrator user:
  - Test: http://10.10.131.21:9702/analytics
  - Production: http://10.10.131.23:9502/analytics

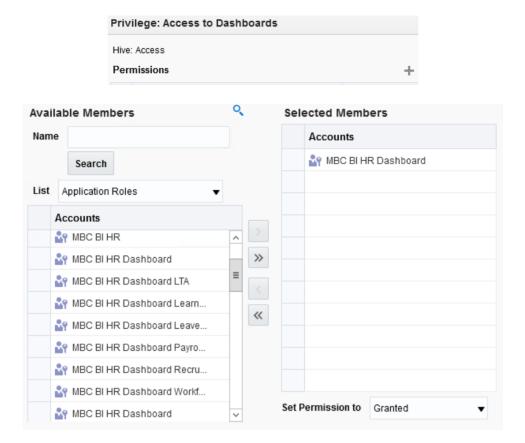


2. Open the *Administration* menu on the top-right corner and select the option *Security* → *Manage Privileges*:



- 3. Grant the following permissions to the Application Role:
  - Access → Access to Dashboards
  - Access → Access to Answers
  - Access → Access to Export
  - Catalog → Personal Storage
  - Home and Header → Access Home Page
  - Home and Header → New Menu
  - Home and Header → Dashboards Menu
  - Home and Header → My Account Link
  - My Account → Access to My Account
  - My Account → Change Preferences

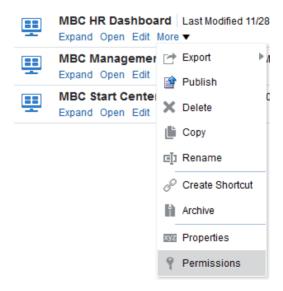
For this, click on the members of the corresponding *Privilege*, click on the *plus sign* button, *Search* the new application role, move it to selected members and click *OK* button:



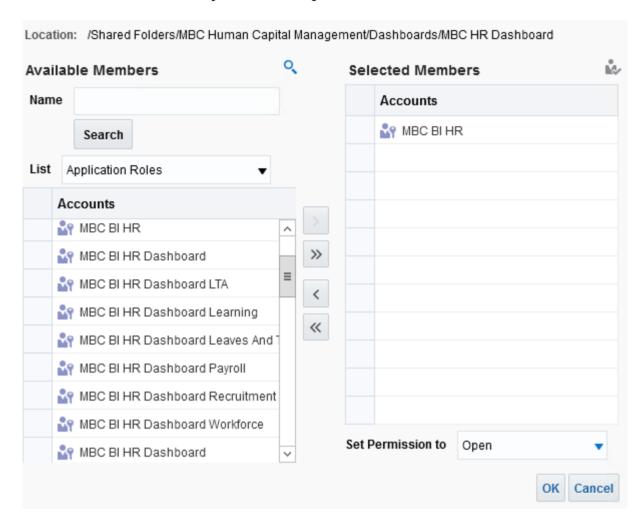
4. Go back to the catalog by clicking on the *Catalog* button:

Catalog

5. For each element of the catalog (Dashboards and Analyses) that you want this new Application Role to access, set the permission. For this, on each element click on *More* and select *Permissions*:



6. Click on the *plus-sign* button, *Search* for the Application Role, move it to the *Selected Members* column, set the permission to *Open* and click *OK*:



7. Repeat this last step for all required elements of the OBIEE Catalog.

### 6.4. Data Security

#### **6.4.1. Defined EBS Responsibilities**

The following mapping between EBS Responsibilities and OBIEE Data Filters has been defined for this project based on the requirements of the involved parties:

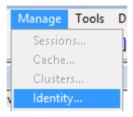
### **CLEAR**PEAKS

	Dashboard			Human Resources Dashboard			
	Logical Table	Dim - MBC Organization Hierarchy			Dim - MBC Company	Dim - MBC Organization Hierarchy	Dim - MBC Company
	Logical Column	Business Unit Name	Directorate Name	Department Name	Company Name	Business Unit Name	Company Name
	MBC BI Management Tech Ops	MBC - Dubai	Group Techicall Operations	All	All		
	MBC BI Management Tech Ops - ERP	MBC - Dubai	Group Techicall Operations	Tech Ops - ERP	All		
	MBC BI Management Tech Ops - Sudio City	MBC - Dubai	Group Techicall Operations	Tech Ops - MBC Studio City	All		
	MBC BI Management Tech Ops - MBPM	MBC - Dubai	Group Techicall Operations	Tech Ops - Media Business Process Mgmt	All		
	MBC BI Management Tech Ops - Admin	MBC - Dubai	Group Techicall Operations	Tech Ops – Admin	All		
	MBC BI Management Tech Ops - Broadcast	MBC - Dubai	Group Techicall Operations	Tech Ops – Broadcast	All		
	MBC BI Management Tech Ops - Facilities	MBC - Dubai	Group Techicall Operations	Tech Ops – Facilities	All		
	MBC BI Management Tech Ops - IT	MBC - Dubai	Group Techicall Operations	Tech Ops – IT	All		
	MBC BI Management Tech Ops - Library	MBC - Dubai	Group Techicall Operations	Tech Ops – Library	All		
lity	MBC BI Management Tech Ops - MCR	MBC - Dubai	Group Techicall Operations	Tech Ops – MCR	All		
Oracle EBS Responsibility	MBC BI Management Tech Ops - Transmission	MBC - Dubai	Group Techicall Operations	Tech Ops – Transmission	All		
espo	MBC BI Management Tech Ops - Web Development	MBC - Dubai	Group Techicall Operations	Web Development	All		
BS I	MBC BI Management Tech Ops - Engineering FD	MBC - Dubai	Group Techicall Operations	Engineering - Front Office Desk	All		
acle I	MBC BI Management Tech Ops - Transmission - AA	MBC - Dubai	Group Techicall Operations	Tech Ops – Transmission	Al Arabiya		
Or	MBC BI Management HR	MBC - Dubai	Group Human Resources	All	All		
	MBC BI HR					All	All
	MBC BI HR Dubai					MBC - Dubai	All
	MBC BI HR Egypt					MBC - Egypt	All
	MBC BI HR Jordan					MBC - Jordan	All
	MBC BI HR Lebanon					MBC - Lebanon	All
	MBC BI HR Saudi					MBC - Saudi	All
	MBC BI HR UK					MBC - UK	All
	MBC BI HR Egypt - O3					MBC - Egypt	O3 Masr, O3 Productions
	MBC BI HR Egypt - MBC Egypt					MBC - Egypt	MBC Egypt

#### **6.4.2.** Applying New Data Filter Security Rules

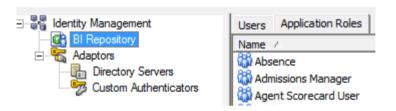
In order to apply new security rules at the OBIEE Data Filter level, please, make sure to first create the required Application Roles as explained in section 6.2.1. Once this is done, follow these steps to apply the security:

1. Open the OBIEE Repository (RPD file) in <u>Offline Mode</u>, open the *Manage* menu and select *Identity...*:



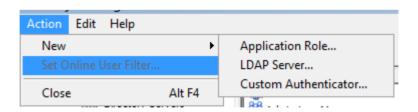
\*NOTE: Editing the RPD online, especially in OBIEE 12c, can lead to important issues in the BI application. It is therefore highly recommended to always work on offline mode.

2. Select *BI Repository* and go to the *Application Roles* tab:



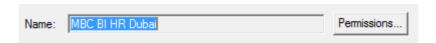
3. As we are editing the RPD in offline mode, it is possible that the new Application Role is not displayed in the list.

To solve this, click on the *Action* menu and select  $New... \rightarrow Application Role...$ :

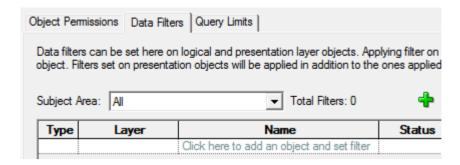


Enter the Application Role details as explained in section 6.2.1.

4. Double-click on the Application Role and select *Permissions...*:



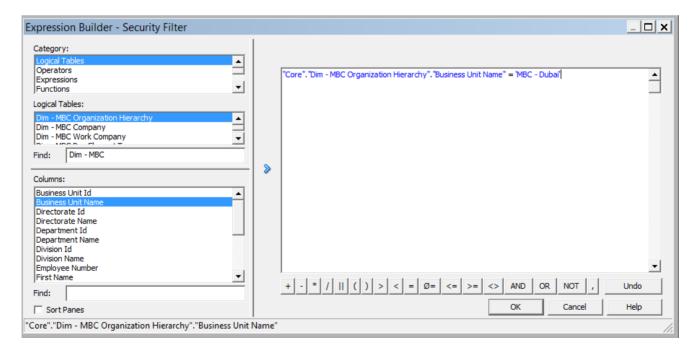
5. Select the *Data Filters* tab and click on the *plus-sign* button to add a new filter:



6. On the new window, select the *Business Model* tab, open the *Core* model and select the *Dimension* you want to filter:



7. Once the new line is added, click on the **Calculator** button (Edit Expression) and *insert the filter expression* you want to apply:



- 8. Repeat the previous step for as many filters as required.
- 9. Once all filters are applied, save the RPD and upload it to the BI server.